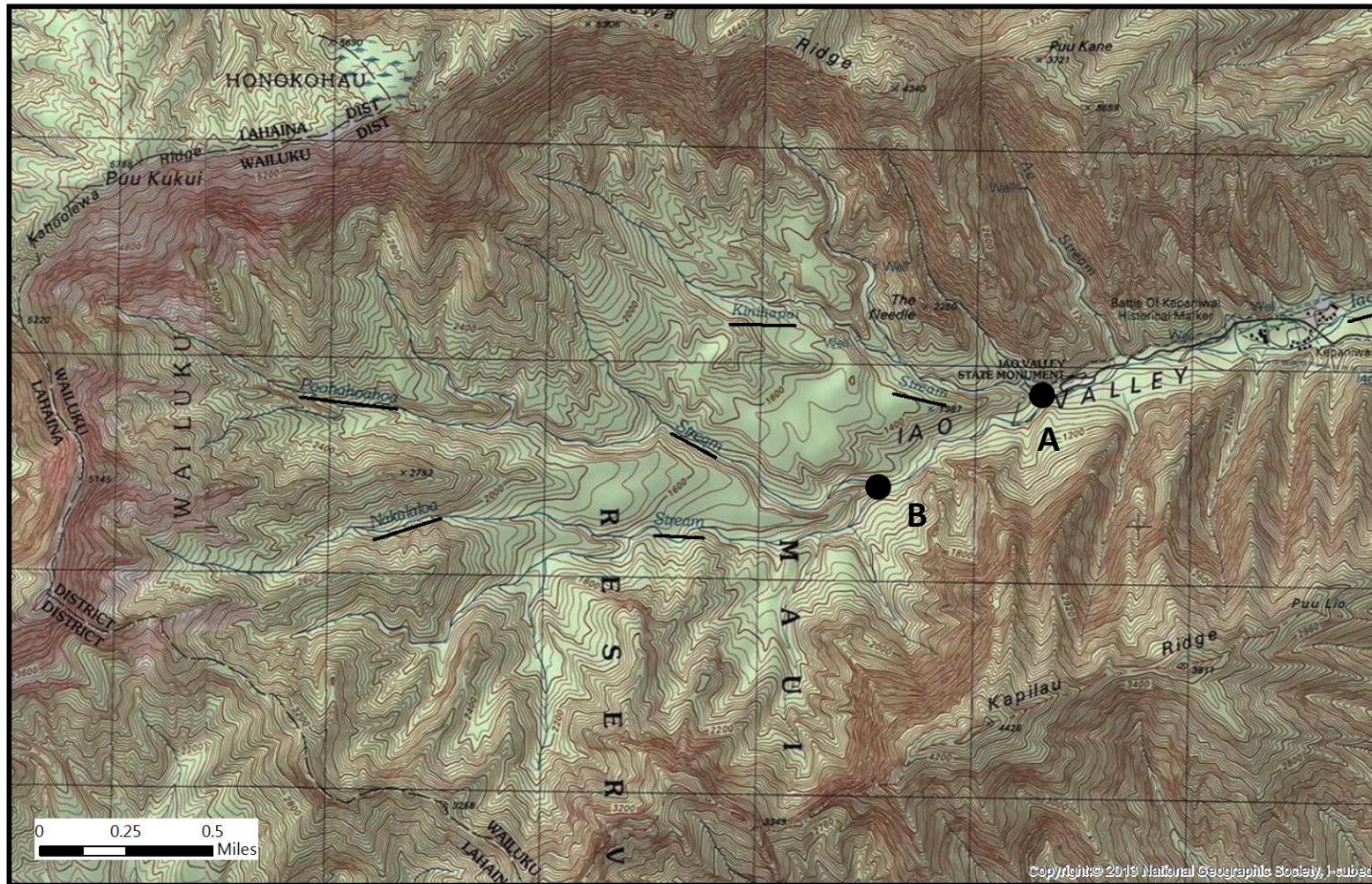


# 1997 Wailuku and Lahaina USGS 1:24,000 quads

--Stream name labels underlined in black for clarity

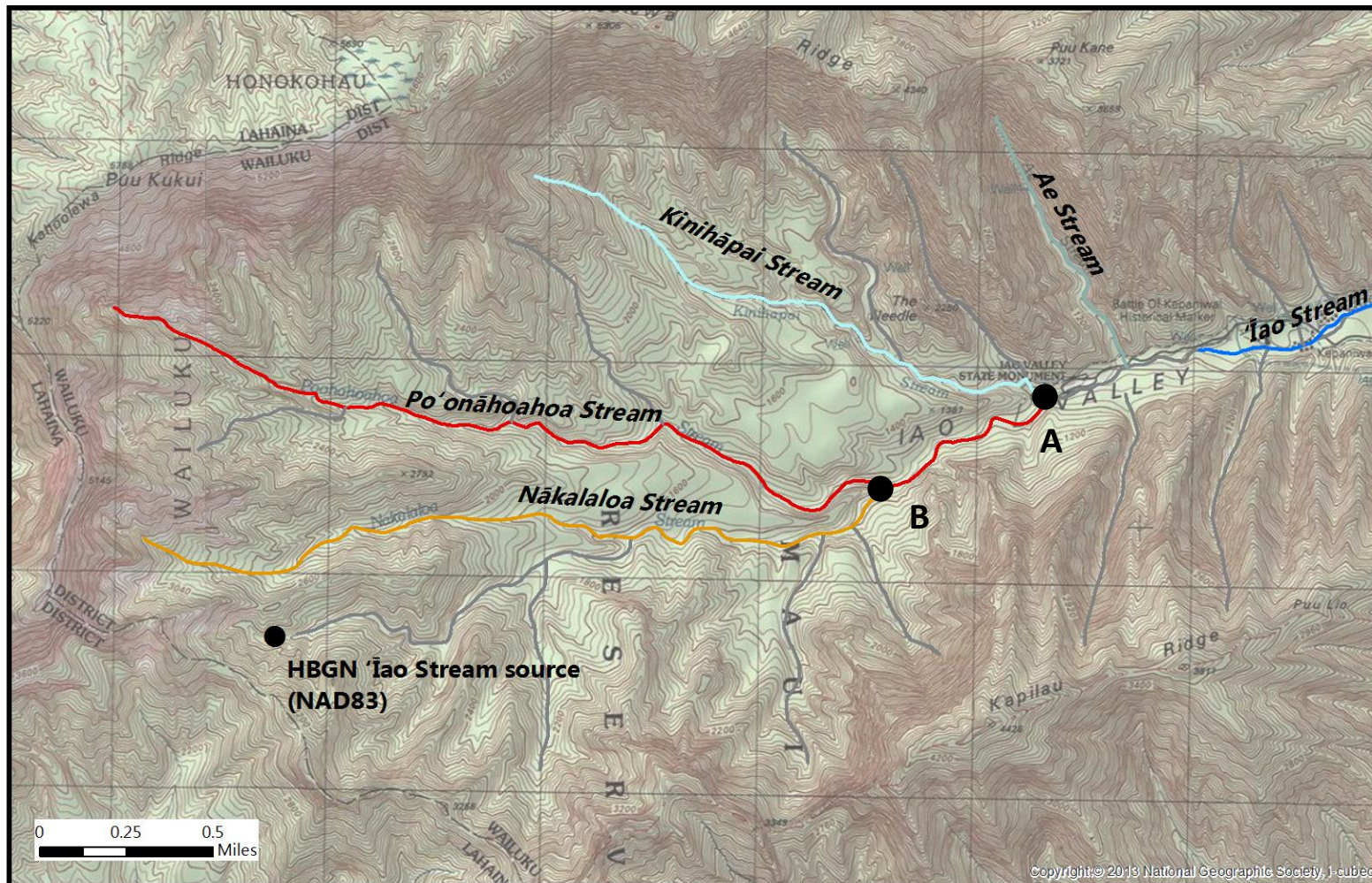


Note the labels for Po'ōnāhoahoa Stream and Nākalalōa Stream which imply that both streams converge and end at "B": 20.87671, -156.55290. The proponent's description has the proposed Wailuku River beginning at "A" (20.88039, -156.54582) and describes this as the convergence of Kinihapai Stream and Nākalalōa Stream. NHD and HBGN data put the source of Īao Stream at or near 20.87057, -156.57933.



# GNIS names and application

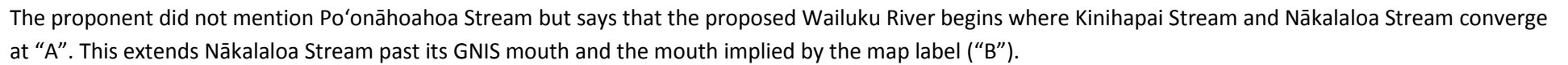
- Flowlines from NHD
- Named tributaries in color



It's clear the the GNIS source coordinates for 'Iao Stream (proposed as Wailuku River) are incorrect—it just starts in the middle of the valley and not at any stream junction. The extent of Nākalaloa Stream is correct based on the map, ending at “B”, but Po'ōnāhoahoa Stream ends at the confluence with Kinihapai Stream at “A”, past its map label.



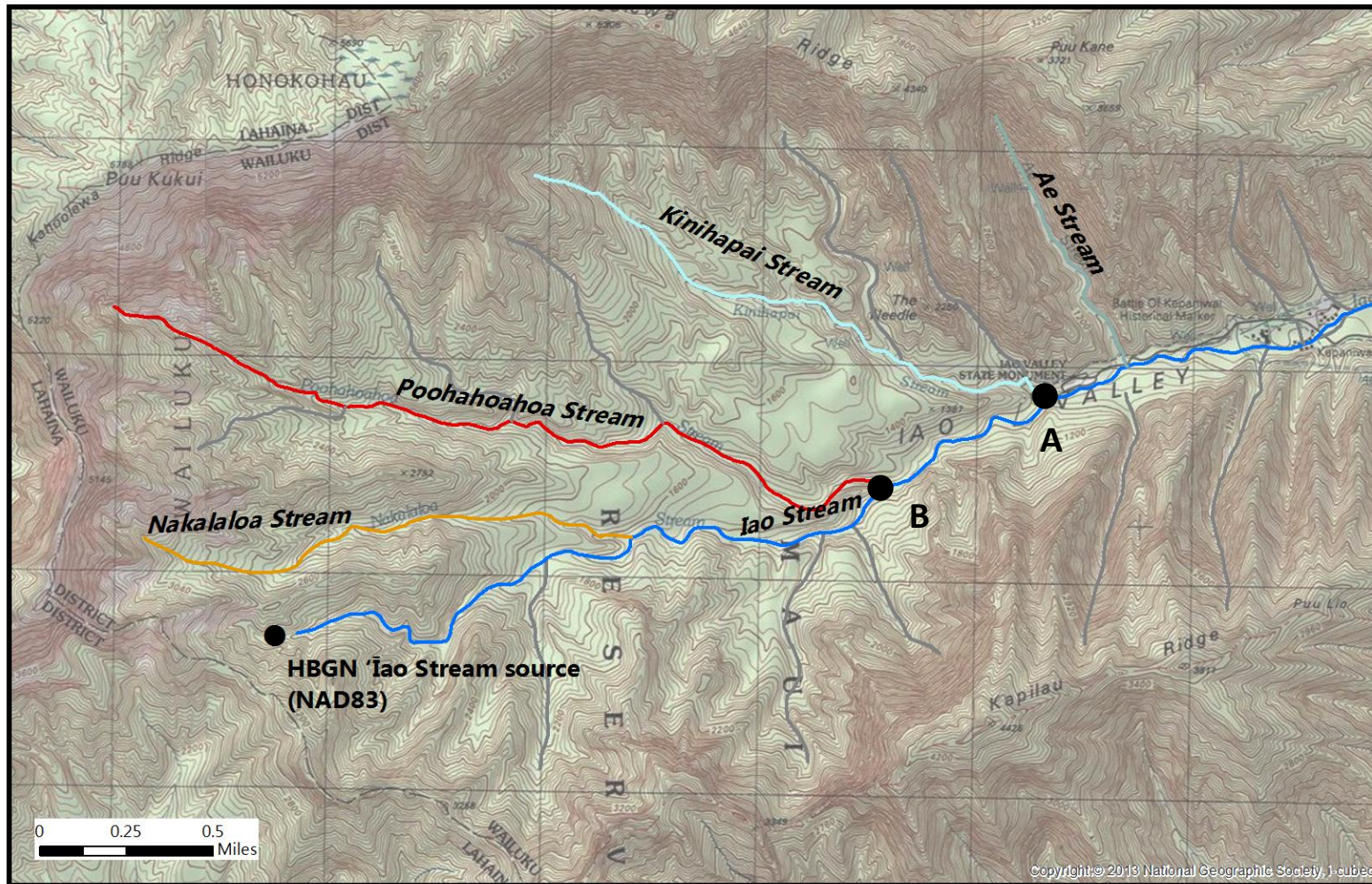
--Flowlines from NHD  
--Named tributaries in color





# NHD names and application

- Flowlines from NHD
- Named tributaries in color

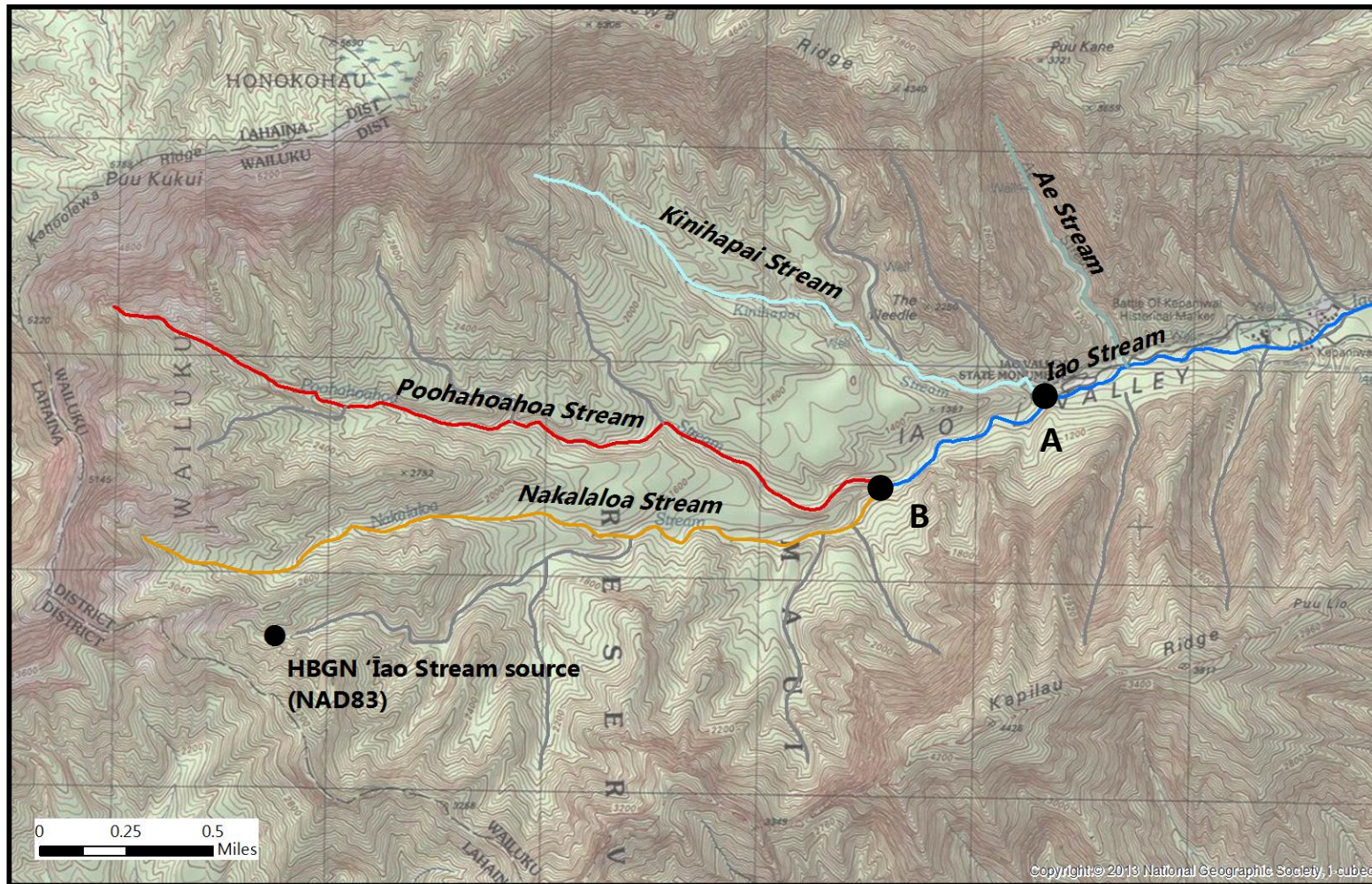


The NHD puts the source of 'Īao Stream further upstream, near where HBGN data has its source (after reprojection from the Old Hawaiian Datum). This contradicts the extent of Po'ōnāhoahoa Stream and Nākalaloa Stream in GNIS and the extent of Nākalaloa Stream based on map labels.



# ulukau.org names and application

- Flowlines from NHD
- Named tributaries in color



The site [ulukau.org](http://ulukau.org) describes 'Īao Stream as starting at "B" where Po'ōnāhoahoa Stream and Nākalaloa Stream converge. This agrees well with map labels, but not with the proponent's description of the proposed Wailuku River (currently 'Īao Stream) which begins at "A".

**In the HBGN's opinion, what are the current extents as understood by locals of 'Īao Stream (proposed as Wailuku River), Po'ōnāhoahoa Stream, and Nākalaloa Stream?**

The 1974 *Place Names of Hawaii* by Mary Kawena Pukui, Samuel H. Elbert, and Esther T. Mookini has the following entries which imply that both ʻĪao Stream and Wailuku River might be used for the stream:

**ʻĪ-ao.** Stream, valley, peak (2,500 feet high), park, and one-time sacred burying place of chiefs (Jarrett 22), Wai-luku qd. (see Kūkae-moku); intermediate school, Wai-luku, Maui. ... *Lit.*, cloud supreme.

**Wai-luku.** [details about a River and State recreation area on Hilo.] Land division, elementary school, quadrangle, heights, city, point, sugar company, and stream, West Maui; site of the battle in the late eighteenth century in which the army of Ka-lani-ʻōpuʻu was nearly annihilated by Ka-hekili of Maui. (Kuy. 1:31; PH 57; RC 148.) See Ke-pani-wai. *Lit.*, water [of] destruction. [Underline added for emphasis].

**Ke-pani-wai.** Park, Wai-luku, Maui. *Lit.*, the water dam (Wai-luku Stream was choked with human bodies after the slaughter there; see Wai-luku.) [Underline added for emphasis].

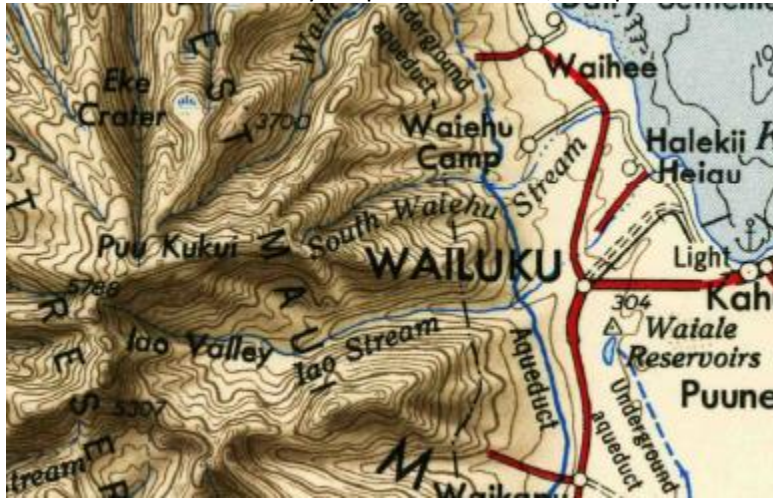
The 1913 USGS Water Supply Paper 318, “Water resources of Hawaii, 1909-1911” contains a gazetteer. The entry for lao reads:

**lao**, large stream, Wailuku district, Maui; rises near summit of East [sic] Maui...

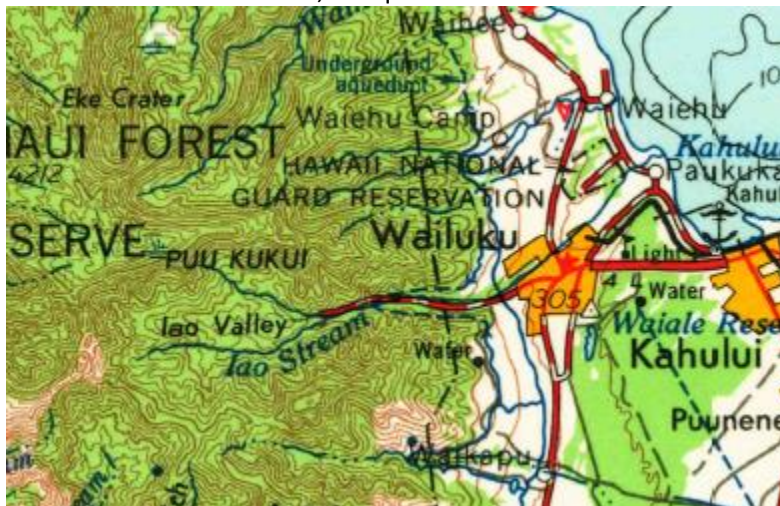
[This must mean West Maui. The GNIS entry description reads: “Rises near the summit of West Maui....” The summit of West Maui is Puʻukukui--Puu Kukui on older topo maps--at 5788ʻ which is near the source of Poʻonāhoahoa Stream.]



From the 1954 Maui Army Map Service 1:250,000 quad



From the 1966 AMS 1:250,000 quad



From the 1975 Maui County USGS 1:100,000 quad

